

Sequence Listing

<110> Botstein,David

Desnoyers,Luc

Ferrara,Napolcone

Fong,Sherman

Gao,Wei-Qiang

Goddard,Audrey

Gurney,Austin L.

Pan,James

Roy,Margaret Ann

Stewart,Timothy A.

Tumas,Daniel

Watanabe,Colin K.

Wood,William I.

<120> Secreted and Transmembrane Polypeptides and Nucleic
Acids Encoding the Same

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<151> 1999-02-09

Patent & Trademark Office

<151> 2000-03-03

<150> PCT/US99/12252

<151> 1999-06-02

<150> PCT/US99/28634

<151> 1999-12-01

<150> PCT/US99/28551

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Arg	Leu	Gly	Glu	Pro	Glu	Asp	Cys	Ala	Gly	Ile	Val	Ser	Phe	Leu	245	250	255
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Gln Thr Glu Cys Val Asp Pro Val Tyr Glu Pro Asp Gln Cys Cys		
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Pro Ile Cys Lys Asn Gly Pro Asn Cys Phe Ala Glu Thr Ala Val		
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Ile Pro Ala Gly Arg Glu Val Lys Thr Asp Glu Cys Thr Ile Cys		
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Parameter	Value	Unit	Reference
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Pressure	1.0	atm	[1]
Flow rate	1.0	L/min	[1]
Concentration	0.1	mol/L	[1]
pH	7.0		[1]
Wavelength	254	nm	[1]
Scan rate	1.0	nm/min	[1]
Integration time	1.0	s	[1]
Resolution	0.1	nm	[1]
Detector	Photodiode array		[1]
Column	C18		[1]
Mobile phase	Water/Acetonitrile		[1]
Gradient	0-100% ACN in 10 min		[1]
Injection volume	10	μL	[1]
Sample concentration	1.0	mg/mL	[1]
Recovery	100	%	[1]
Stability	1.0	h	[1]
Linearity	0.1-10	μg/mL	[1]
LOD	0.1	μg/mL	[1]
LOQ	0.3	μg/mL	[1]
Accuracy	100	%	[1]
Precision	1.0	%	[1]
Robustness	1.0	%	[1]
Specificity	100	%	[1]
Method validation	Yes		[1]
Method description	HPLC-MS/MS		[1]
Instrumentation	Agilent 1200 HPLC system with Agilent 1100 MS system		[1]
Software	Agilent ChemStation		[1]
Author	J. Smith		[1]
Year	2010		[1]
Journal	Journal of Chromatography B		[1]
Volume	878		[1]
Issue	1		[1]
Pages	1-10		[1]
DOI	10.1016/j.jchromb.2010.01.001		[1]
Keywords	Chromatography; Mass spectrometry; Method validation		[1]
Abstract	A method for the determination of... (text truncated)		[1]
Introduction	The present study was aimed at... (text truncated)		[1]
Materials and Methods	The HPLC system consisted of... (text truncated)		[1]
Results and Discussion	The results showed that the... (text truncated)		[1]
Conclusion	The method was found to be... (text truncated)		[1]
References	[1] J. Smith, et al., Journal of Chromatography B, 878, 1-10 (2010).		[1]

15

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Cys Thr Glu Ala Lys Asp Gln Glu Pro Arg Val Thr Glu His Arg
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Cys Pro Lys Gly Thr Thr His Cys Tyr Asp Gly Leu Leu Arg Leu
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Arg Gly Gly Gly Ile Phe Ser Asn Leu Arg Val Gln Gly Cys Met
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Pro Val Gly Met Thr Glu Asn Cys Asn Arg Lys Asp Phe Leu Thr
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Cys His Arg Gly Thr Thr Ile Met Thr His Gly Asn Leu Ala Gln
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 Tyr Phe Gly Thr Lys Thr Arg Tyr Glu Asp Val Asn Pro Val Leu
 50 55 60
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 Gly Thr Cys Thr Pro Val Gln Leu Val Ala Leu Ile Arg His Gly
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Leu	Ala	Leu	Ile	Thr	Leu	Gly	Ile	Cys	Cys	Ala	Tyr	Arg	Arg	Gly	260	265	270	
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290

295

300

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Gln	Ala	Val	Ala	His	Asp	Pro	Gln	Thr	Leu	Glu	Gln	Asn	Ile	Met	
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Asp	Lys	Asn	Tyr	Met	Ala	His	Leu	Val	Glu	Val	Gln	His	Glu	Arg	
				125					130					135	
Gly	Ala	Ser	Gly	Gly	Gln	Thr	Phe	His	Ser	Leu	Leu	Thr	Ala	Ser	
				140					145					150	
Leu	Pro	Pro	Arg	Arg	Asp	Ser	Thr	Glu	Ala	Pro	Lys	Pro	Lys	Ser	
				155					160					165	
Ser	Pro	Glu	Gln	Pro	Ile	Gly	Gln	Gly	Arg	Ile	Arg	Val	Gly	Thr	
				170					175					180	
Gln	Leu	Arg	Val	Leu	Gly	Pro	Glu	Asp	Asp	Leu	Ala	Gly	Met	Phe	
				185					190					195	
Leu	Gln	Ile	Phe	Pro	Leu	Ser	Pro	Asp	Pro	Arg	Trp	Gln	Ser	Ser	
				200					205					210	
Ser	Pro	Arg	Pro	Val	Ala	Leu	Ala	Leu	Gln	Gln	Ala	Leu	Gly	Gln	
				215					220					225	
Glu	Leu	Ala	Arg	Val	Val	Gln	Gly	Ser	Pro	Glu	Val	Pro	Gly	Ile	
				230					235					240	
Thr	Val	Arg	Val	Leu	Gln	Ala	Leu	Ala	Thr	Leu	Leu	Ser	Ser	Pro	
				245					250					255	
His	Gly	Gly	Ala	Leu	Val	Met	Ser	Met	His	Arg	Ser	His	Phe	Leu	
				260					265					270	
Ala	Cys	Pro	Leu	Leu	Arg	Gln	Leu	Cys	Gln	Tyr	Gln	Arg	Cys	Val	
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Pro	Gln	Asp	Thr	Gly	Phe	Ser	Ser	Leu	Phe	Leu	Lys	Val	Leu	Leu	
				290					295					300	
Gln	Met	Leu	Gln	Trp	Leu	Asp	Ser	Pro	Gly	Val	Glu	Gly	Gly	Pro	
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Leu	Arg	Ala	Gln	Leu	Arg	Met	Leu	Ala	Ser	Gln	Ala	Ser	Ala	Gly	
				320					325					330	
Arg	Arg	Leu	Ser	Asp	Val	Arg	Gly	Gly	Leu	Leu	Arg	Leu	Ala	Glu	
				335					340					345	
Ala	Leu	Ala	Phe	Arg	Gln	Asp	Leu	Glu	Val	Val	Ser	Ser	Thr	Val	
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Arg	Ala	Val	Ile	Ala	Thr	Leu	Arg	Ser	Gly	Glu	Gln	Cys	Ser	Val	
				365					370					375	
Glu	Pro	Asp	Leu	Ile	Ser	Lys	Val	Leu	Gln	Gly	Leu	Ile	Glu	Val	
				380					385					390	
Arg	Ser	Pro	His	Leu	Glu	Glu	Leu	Leu	Thr	Ala	Phe	Phe	Ser	Ala	

				395					400					405
Thr	Ala	Asp	Ala	Ala	Ser	Pro	Phe	Pro	Ala	Cys	Lys	Pro	Val	Val
				410					415					420
Val	Val	Ser	Ser	Leu	Leu	Leu	Gln	Glu	Glu	Glu	Pro	Leu	Ala	Gly
				425					430					435
Gly	Lys	Pro	Gly	Ala	Asp	Gly	Gly	Ser	Leu	Glu	Ala	Val	Arg	Leu
				440					445					450
Gly	Pro	Ser	Ser	Gly	Leu	Leu	Val	Asp	Trp	Leu	Glu	Met	Leu	Asp
				455					460					465
Pro	Glu	Val	Val	Ser	Ser	Cys	Pro	Asp	Leu	Gln	Leu	Arg	Leu	Leu
				470					475					480
Phe	Ser	Arg	Arg	Lys	Gly	Lys	Gly	Gln	Ala	Gln	Val	Pro	Ser	Phe
				485					490					495
Arg	Pro	Tyr	Leu	Leu	Thr	Leu	Phe	Thr	His	Gln	Ser	Ser	Trp	Pro
				500					505					510
Thr	Leu	His	Gln	Cys	Ile	Arg	Val	Leu	Leu	Gly	Lys	Ser	Arg	Glu
				515					520					525
Gln	Arg	Phe	Asp	Pro	Ser	Ala	Ser	Leu	Asp	Phe	Leu	Trp	Ala	Cys
				530					535					540
Ile	His	Val	Pro	Arg	Ile	Trp	Gln	Gly	Arg	Asp	Gln	Arg	Thr	Pro
				545					550					555
Gln	Lys	Arg	Arg	Glu	Glu	Leu	Val	Leu	Arg	Val	Gln	Gly	Pro	Glu
				560					565					570
Leu	Ile	Ser	Leu	Val	Glu	Leu	Ile	Leu	Ala	Glu	Ala	Glu	Thr	Arg
				575					580					585
Ser	Gln	Asp	Gly	Asp	Thr	Ala	Ala	Cys	Ser	Leu	Ile	Gln	Ala	Arg
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Leu	Pro	Leu	Leu	Leu	Ser	Cys	Cys	Cys	Gly	Asp	Asp	Glu	Ser	Val
				605					610					615
Arg	Lys	Val	Thr	Glu	His	Leu	Ser	Gly	Cys	Ile	Gln	Gln	Trp	Gly
				620					625					630
Asp	Ser	Val	Leu	Gly	Arg	Arg	Cys	Arg	Asp	Leu	Leu	Leu	Gln	Leu
				635					640					645
Tyr	Leu	Gln	Arg	Pro	Glu	Leu	Arg	Val	Pro	Val	Pro	Glu	Val	Leu
				650					655					660
Leu	His	Ser	Glu	Gly	Ala	Ala	Ser	Ser	Ser	Val	Cys	Lys	Leu	Asp
				665					670					675
Gly	Leu	Ile	His	Arg	Phe	Ile	Thr	Leu	Leu	Ala	Asp	Thr	Ser	Asp
				680					685					690

Ser Arg Ala Leu	Glu Asn Arg Gly Ala	Asp Ala Ser Met Ala Cys
695	700	705
Arg Lys Leu Ala	Val Ala His Pro Leu	Leu Leu Arg His Leu
710	715	720
Pro Met Ile Ala	Ala Leu Leu His Gly	Arg Thr His Leu Asn Phe
725	730	735
Gln Glu Phe Arg	Gln Gln Asn His Leu	Ser Cys Phe Leu His Val
740	745	750
Leu Gly Leu Leu	Glu Leu Leu Gln Pro	His Val Phe Arg Ser Glu
755	760	765
His Gln Gly Ala	Leu Trp Asp Cys Leu	Leu Ser Phe Ile Arg Leu
770	775	780
Leu Leu Asn Tyr	Arg Lys Ser Ser Arg	His Leu Ala Ala Phe Ile
785	790	795
Asn Lys Phe Val	Gln Phe Ile His Lys	Tyr Ile Thr Tyr Asn Ala
800	805	810
Pro Ala Ala Ile	Ser Phe Leu Gln Lys	His Ala Asp Pro Leu His
815	820	825
Asp Leu Ser Phe	Asp Asn Ser Asp Leu	Val Met Leu Lys Ser Leu
830	835	840
Leu Ala Gly Leu	Ser Leu Pro Ser Arg	Asp Asp Arg Thr Asp Arg
845	850	855
Gly Leu Asp Glu	Glu Gly Glu Glu Glu	Ser Ser Ala Gly Ser Leu
860	865	870
Pro Leu Val Ser	Val Ser Leu Phe Thr	Pro Leu Thr Ala Ala Glu
875	880	885
Met Ala Pro Tyr	Met Lys Arg Leu Ser	Arg Gly Gln Thr Val Glu
890	895	900
Asp Leu Leu Glu	Val Leu Ser Asp Ile	Asp Glu Met Ser Arg Arg
905	910	915
Arg Pro Glu Ile	Leu Ser Phe Phe Ser	Thr Asn Leu Gln Arg Leu
920	925	930
Met Ser Ser Ala	Glu Glu Cys Cys Arg	Asn Leu Ala Phe Ser Leu
935	940	945
Ala Leu Arg Ser	Met Gln Asn Ser Pro	Ser Ile Ala Ala Ala Phe
950	955	960
Leu Pro Thr Phe	Met Tyr Cys Leu Gly	Ser Gln Asp Phe Glu Val
965	970	975
Val Gln Thr Ala	Leu Arg Asn Leu Pro	Glu Tyr Ala Leu Leu Cys

980

985

990

Gln Glu His Ala Ala Val Leu Leu His Arg Ala Phe Leu Val Gly
995 1000 1005

Met Tyr Gly Gln Met Asp Pro Ser Ala Gln Ile Ser Glu Ala Leu
1010 1015 1020

Arg Ile Leu His Met Glu Ala Val Met
1025

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<211> 2186

<212> DNA

<213> Homo sapiens

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cgcccttctc tcgctgtcct ggtacgcggc actcagcggc cagaaaggcg 150
acgttgtgga cgtttaccag cgggagttcc tggcgctgcg cgatcggttg 200
cacgcagctg agcaggagag cctcaagcgc tccaaggagc tcaacctggg 250
gctggacgag atcaagaggg ccgtgtcaga aaggcaggcg ctgcgagacg 300
gagacggcaa tcgcacctgg ggccgcctaa cagaggaccc ccgattgaag 350
ccgtggaacg gctcacaccg gcacgtgctg cacctgccca ccgtcttcca 400
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gttcattctc atgttctacc gggacaagcc catcgactgg ctcttgacc 1050

Gln	Lys	Gly	Asp	Val	Val	Asp	Val	Tyr	Gln	Arg	Glu	Phe	Leu	Ala		35	40	45
Leu	Arg	Asp	Arg	Leu	His	Ala	Ala	Glu	Gln	Glu	Ser	Leu	Lys	Arg		50	55	60
Ser	Lys	Glu	Leu	Asn	Leu	Val	Leu	Asp	Glu	Ile	Lys	Arg	Ala	Val		65	70	75
Ser	Glu	Arg	Gln	Ala	Leu	Arg	Asp	Gly	Asp	Gly	Asn	Arg	Thr	Trp		80	85	90
Gly	Arg	Leu	Thr	Glu	Asp	Pro	Arg	Leu	Lys	Pro	Trp	Asn	Gly	Ser		95	100	105
His	Arg	His	Val	Leu	His	Leu	Pro	Thr	Val	Phe	His	His	Leu	Pro		110	115	120
His	Leu	Leu	Ala	Lys	Glu	Ser	Ser	Leu	Gln	Pro	Ala	Val	Arg	Val		125	130	135
Gly	Gln	Gly	Arg	Thr	Gly	Val	Ser	Val	Val	Met	Gly	Ile	Pro	Ser		140	145	150
Val	Arg	Arg	Glu	Val	His	Ser	Tyr	Leu	Thr	Asp	Thr	Leu	His	Ser		155	160	165
Leu	Ile	Ser	Glu	Leu	Ser	Pro	Gln	Glu	Lys	Glu	Asp	Ser	Val	Ile		170	175	180
Val	Val	Leu	Ile	Ala	Glu	Thr	Asp	Ser	Gln	Tyr	Thr	Ser	Ala	Val		185	190	195
Thr	Glu	Asn	Ile	Lys	Ala	Leu	Phe	Pro	Thr	Glu	Ile	His	Ser	Gly		200	205	210
Leu	Leu	Glu	Val	Ile	Ser	Pro	Ser	Pro	His	Phe	Tyr	Pro	Asp	Phe		215	220	225
Ser	Arg	Leu	Arg	Glu	Ser	Phe	Gly	Asp	Pro	Lys	Glu	Arg	Val	Arg		230	235	240
Trp	Arg	Thr	Lys	Gln	Asn	Leu	Asp	Tyr	Cys	Phe	Leu	Met	Met	Tyr		245	250	255
Ala	Gln	Ser	Lys	Gly	Ile	Tyr	Tyr	Val	Gln	Leu	Glu	Asp	Asp	Ile		260	265	270
Val	Ala	Lys	Pro	Asn	Tyr	Leu	Ser	Thr	Met	Lys	Asn	Phe	Ala	Leu		275	280	285
Gln	Gln	Pro	Ser	Glu	Asp	Trp	Met	Ile	Leu	Glu	Phe	Ser	Gln	Leu		290	295	300
Gly	Phe	Ile	Gly	Lys	Met	Phe	Lys	Ser	Leu	Asp	Leu	Ser	Leu	Ile		305	310	315
Val	Glu	Phe	Ile	Leu	Met	Phe	Tyr	Arg	Asp	Lys	Pro	Ile	Asp	Trp				

	320		325		330
Leu Leu Asp His	Ile Leu Trp Val Lys	Val Cys Asn Pro Glu Lys			
	335	340			345
Asp Ala Lys His	Cys Asp Arg Gln Lys	Ala Asn Leu Arg Ile Arg			
	350	355			360
Phe Lys Pro Ser	Leu Phe Gln His Val	Gly Thr His Ser Ser Leu			
	365	370			375
Ala Gly Lys Ile	Gln Lys Leu Lys Asp	Lys Asp Phe Gly Lys Gln			
	380	385			390
Ala Leu Arg Lys	Glu His Val Asn Pro	Pro Ala Glu Val Ser Thr			
	395	400			405
Ser Leu Lys Thr	Tyr Gln His Phe Thr	Leu Glu Lys Ala Tyr Leu			
	410	415			420
Arg Glu Asp Phe	Phe Trp Ala Phe Thr	Pro Ala Ala Gly Asp Phe			
	425	430			435
Ile Arg Phe Arg	Phe Phe Gln Pro Leu	Arg Leu Glu Arg Phe Phe			
	440	445			450
Phe Arg Ser Gly	Asn Ile Glu His Pro	Glu Asp Lys Leu Phe Asn			
	455	460			465
Thr Ser Val Glu	Val Leu Pro Phe Asp	Asn Pro Gln Ser Asp Lys			
	470	475			480
Glu Ala Leu Gln	Glu Gly Arg Thr Ala	Thr Leu Arg Tyr Pro Arg			
	485	490			495
Ser Pro Asp Gly	Tyr Leu Gln Ile Gly	Ser Phe Tyr Lys Gly Val			
	500	505			510
Ala Glu Gly Glu	Val Asp Pro Ala Phe	Gly Pro Leu Glu Ala Leu			
	515	520			525
Arg Leu Ser Ile	Gln Thr Asp Ser Pro	Val Trp Val Ile Leu Ser			
	530	535			540
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<400> 25

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<400> 27
actcgggatt cctgctgtt 19

<210> 28
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<400> 28
aggcctttac ccaaggccac aac 23

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<400> 30
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<400> 31

ctgtggtacc caattgccgc cttgt 25

<210> 32

<211> 23

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<220>

<223> Synthetic Oligonucleotide Probe

<400> 32

attgtcctga gattcgagca aga 23

<210> 33

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 33

gtccagcaag ccctcatt 18

<210> 34

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic Oligonucleotide Probe

<400> 34

cttctgggcc acagccctgc 20

<210> 35

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Top Secret

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cgggcgccca agtaaaagct c 21

<211> 28

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